

## APPENDIX B

### BIOLOGICAL INVENTORY RELEVANT TO THE PROJECT\*

\*These lists include those plants and invertebrates recorded as present in the Florida reef ridges by the investigators cited in the references. Abundance notations are those of the cited literature. Fishes listed are those with recorded ranges including the project area. Abundance notations and impact notations for corals and fishes are defined on the following pages.



Abundance and Impact Notations Used for  
Scleractinian (Hard) and Gorgonian (Soft)  
Corals and Fishes

Scleractinian Corals

Abundant: Ten percent or more dominant among scleractinian corals on Florida reef ridges (Goldberg, 1973).

Common: 0.9 percent to 5 percent dominant among scleractinian corals on Florida reef ridges (Ibid.).

Uncommon: 0.7 percent to 0.9 percent dominant among scleractinian corals on Florida reef ridges (Ibid.).

Gorgonian Corals

Abundant: Five percent or more dominant among gorgonian corals on Florida reef ridges (Ibid.).

Common: 0.1 percent to 5 percent dominant among gorgonian corals on Florida reef ridges (Ibid.).

Uncommon: 0.07 percent to 0.08 percent dominant among gorgonian corals on Florida reef ridges (Ibid.).

Fishes

Very Abundant: Schooling forage fishes, characteristically seen massed in great numbers (menhaden, sardines).

Abundant: Wide-ranging, schooling or congregating species, smaller schools (shad, porgy, spanish mackerel).

Common: Characteristic resident component of ecosystem(s) of the region. e. g., characteristic of reefs, surf, etc. (red drum, catfish, lemon shark).

Uncommon: Solitary and wide-ranging in the region, or narrowly restricted by habitat requirements (shootfin mako, bridle cardinalfish).

Occasional: At limit of range; rarely encountered in region.

### Impacts

Minimal: None to temporary displacement due to disturbance proximal to the habitat, but no habitat reduction. Species uses the project area only optionally and opportunistically.

Moderate: Direct habitat and/or food chain disturbance with no or little permanent reduction in preferred habitat. Species characteristically associated with sandy bottoms or reef areas like that in the project area, peripheral to the reef community.

Severe: Reduction in habitat or food chain resulting in population reduction or elimination in the project area. Species characteristically a part of the living reef coral community.

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Alga:					
<u>Dictyota</u> sp.	Marine littoral	East coast	Common	Florida to Carolinas	Minimal
<u>Padina</u> sp.	Marine littoral	East coast	Common	Coastal	Minimal
Higher plants:					
Bermuda grass	Perennial				
<u>Cynodon dactylon</u>	Lawn grass	Statewide	Abundant	South	None
Seashore paspalum <u>Paspalum setaceum</u>	Coastal sands, pine lands	Statewide	Common	Fla., Tex., Nebr., to N.H., Cuba	None
Broom sedge <u>Andropogon</u> <u>virginicus</u>	Sandy soil, marshy glades	Sandy prairies	Common	West I. to Mass., Calif.	None
Coconut palm <u>Cocos nucifera</u>	Naturalized ornamental	South, Keys	Frequent	South Florida	None
Cabbage palm <u>Sabal palmetto</u>	Hammocks, prairie	Statewide	Common	To N.C., West I.	None
Scrub palmetto <u>Sabal etonia</u>	White sand scrub	Central Fla.	Frequent	Endemic to Central Fla.	None
Saw palmetto <u>Serenoa repens</u>	Coastal dunes, sand hills	Statewide	Common	To N.C.	None
Australian pine <u>Casuarina</u> <u>equisetifolia</u>	Sandy shores, pinelands	So. Florida	Frequent	S. Fla., Everglades	None
Red mangrove <u>Rhizophora mangle</u>	Coastal areas, embayments	So. Florida	Frequent	S. Fla.	None
White mangrove <u>Laguncularia</u> <u>racemosa</u>	High coastal ground	So. Florida	Frequent	S. Fla.	None

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Black mangrove <u>Avicennia germinans</u>	Coastal swamps	So. Florida	Common	Fla. to La.	None
Baccharis shrubs <u>Baccharis</u> spp.	Salt marshes, hammocks, swamps	Central, So. Florida	Common	Fla., Texas, N.C.	None
Turtle grass <u>Thalassia</u> <u>testudinum</u>	Coast of Gulf of Mexico	So. Florida	Abundant	Gulf coast, Southeast Fla.	None
Invertebrates:					
Vase sponge <u>Dasychalina</u> <u>cyathina</u>	Reefs, rocky areas	Coast	Frequent	Atlantic coast	Minimal
Loggerhead sponge <u>Spheciospongia</u> <u>vesparia</u>	Reefs, rocky areas	So. coast	Frequent	South Atlantic coast	Minimal
Unidentified sponges					Minimal
Arrow crab <u>Stenorynchus</u> <u>seticornis</u>	Rocky to sandy bottoms	Atl. coast and offshore	Frequent	N.C., so. on Atlantic coast	Minimal
Mole crab <u>Emerita talpoida</u>	Intertidal sandy beaches	Atlantic coast	Abundant	Both coasts	Moderate
Spiny lobster <u>Panulirus hispidus</u>	Reefs, rocks, cover	Both coasts	Frequent	N.C., thru Gulf of Mex.	Minimal
Coral shrimp <u>Stenopus hispidus</u>	Coral reefs	South Fla. reefs	Frequent	So. Fla. reefs	Severe
Crab <u>Pagrus depressa</u>	Reef, rocks	Coastal	Abundant	Coastal	Moderate
Coquina shell <u>Donax variabilis</u>	Sandy beaches	Both coasts	Abundant	N. C. to Texas	Moderate
Atlantic wing oyster <u>Pteria colymbus</u>	Hard substrates	Atlantic coast	Frequent	N.C., south	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
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Unidentified worms:

Sabellid, serpulid	Encrusting on shells	Coast	Frequent	Cosmo- politan	Moderate
Long-spined sea urchin, <u>Diadema</u> <u>antillarum</u>	Reef communities	Florida reefs	Frequent		Severe
Pencil urchin <u>Eucidaris</u> <u>tribuloides</u>	Reef communities	Florida reefs	Frequent		Severe
Common sea urchin <u>Lytechinus</u> <u>variegatus</u>	Reef communities	Florida reefs	Common		Severe
Sea urchin, <u>Echino-</u> <u>metra lucunter</u>	Reef communities	Coastal	Abundant	Coastal	Severe
Unidentified rocks, ascidiaceans wharres					Moderate

Scleractinian corals:

<u>Monastrea</u> <u>cavernosa</u>	9-32 m. deep, optional below 20 m.	Caribbean, South Florida	Abundant	South Florida	Severe
<u>Monastrea</u> <u>annularis</u>	9-32 m. deep, optional below 20 m.	Caribbean, South Florida	Abundant	South Florida	Severe
<u>Meandrina</u> <u>meandrites</u>	30 m. and deeper	Caribbean, South Florida	Very common	South Florida	Severe
<u>Agaricia</u> <u>lamarcki</u>	22-32 m.	Caribbean, South Florida	Very common	South Florida	Severe
<u>Dichocoenia</u> <u>stokesii</u>	9-32 m.	Caribbean South Florida	Very common	South Florida	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Diploria</u> <u>clinosa</u>	9-16 m.	Caribbean, South Florida	Very common	South Florida	Severe
<u>Solenastrea</u> <u>hyades</u>	9-16 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Oculina</u> <u>diffusa</u>	9-16 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Mycetophyllia</u> <u>lamarckiana</u>	9 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Porites</u> <u>astreoides</u>	9-16 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Siderastrea</u> <u>siderea</u>	0.5-32 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Stephanocoenia</u> <u>melaninii</u>	9-32 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Agaricia</u> <u>agarictes</u>	9-30 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Mancinea</u> <u>areolata</u>	16-30 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Mancinia</u> <u>mayori</u>	16-30 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Phyllangia</u> <u>americana</u>	9-16 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Mussa</u> <u>angulosa</u>	16-30 m.	Caribbean, South Florida	Common	South Florida	Severe
<u>Madracis</u> <u>decactis</u>	16-30 m.	Caribbean, South Florida	Uncommon	South Florida	Severe
<u>Cladocora</u> <u>arbuscula</u>	9 m.	Caribbean, South Florida	Uncommon	South Florida	Severe
<u>Eusmilia</u> <u>fastigiata</u>	16 m.	Caribbean, South Florida	Uncommon	South Florida	Severe



Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Colpophyllia</u> <u>natans</u>	16 m.	Caribbean, South Florida	Uncommon	South Florida	Severe
<u>Dichocoenia</u> <u>stellaris</u>	24 m.	Caribbean, South Florida	Uncommon	South Florida	Severe
<u>Scolymia</u> <u>lacera</u>	18 m.	Caribbean, South Florida	Uncommon	South Florida	Severe
<u>Diploria</u> <u>labyrinthiformis</u>	16 m.	Caribbean, South Florida	Uncommon	South Florida	Severe
<u>Acropora</u> <u>cernicornis</u>	16 m.	Caribbean, South Florida	Uncommon	South Florida	Severe
<u>Siderastrea</u> <u>radians</u>	0.5-2 m.	Caribbean, South Florida	Very uncommon	South Florida	Severe
Gorgonian Corals:					
<u>Iciligorgia</u> <u>schrammi</u>	16-32 m.	Caribbean, South Florida	Abundant	South Florida	Moderate
<u>Eunicea</u> <u>calyculata</u>	9-32 m.	Caribbean, South Florida	Abundant	South Florida	Moderate
<u>Ellisella</u> <u>barbadensis</u>	16-32 m.	Caribbean, South Florida	Abundant	South Florida	Moderate
<u>Nicella</u> <u>schmitti</u>	16-32 m.	Caribbean, South Florida	Abundant	South Florida	Moderate
<u>Eunicea</u> <u>palmeri</u>	9-30 m.	Caribbean, South Florida	Abundant	South Florida	Moderate
<u>Swiftia</u> <u>exserta</u>	over 30 m.	Caribbean, South Florida	Abundant	South Florida	Moderate
<u>Plexaura</u> <u>flexuosa</u>	9-30 m.	Caribbean, South Florida	Abundant	South Florida	Moderate
<u>Pseudopterogorgia</u> <u>americana</u>	0.5-22 m.	Caribbean, South Florida	Common	South Florida	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Eunicea</u> <u>tourneforti</u>	16-30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Plexaurella</u> <u>fusfera</u>	16-22 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Muricia</u> <u>muricata</u>	0.5-16 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Muriceopsis</u> <u>petila</u>	over 30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Eunicea</u> <u>pinta</u>	22-30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Pseudopterogorgia</u> <u>rigida</u>	9-30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Ellisella</u> , sp.	22-32 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Eunicea</u> <u>clavigera</u>	16-22 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Briarium</u> <u>asbestinum</u>	9-30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Pseudopterogorgia</u> <u>acerosa</u>	0.5-16 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Gorgonia</u> <u>ventalina</u>	9-22 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Eunicea</u> <u>fusca</u>	9-30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Plexaurella</u> <u>dichotoma</u>	9-22 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Eunicea</u> <u>succinea</u>	9 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Plexaurella</u> <u>grisia</u>	9-16 m.	Caribbean, South Florida	Common	South Florida	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Diodogorgia nodulifera</u>	over 30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Erythropodium caribaeorum</u>	9 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Eunicea laxispica</u>	9 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Eunicea laciniata</u>	9-22 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Pseudoplexaura sp.</u>	over 30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Pseudopterogorgia sp. 1</u>	9-22 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Pterogorgia guadelupensis</u>	9-22 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Plexaurella pumila</u>	30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Pseudopterogorgia navia</u>	over 30 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Pseudopterogorgia sp. 2</u>	16 m.	Caribbean, South Florida	Common	South Florida	Moderate
<u>Pseudopterogorgia elisabethae</u>	22-32 m.	Caribbean, South Florida	Uncommon	South Florida	Moderate
<u>Pterogorgia citrina</u>	9 m.	Caribbean, South Florida	Uncommon	South Florida	Moderate
<u>Muricea pendula</u>	over 30 m.	Caribbean, South Florida	Uncommon	South Florida	Moderate
<u>Muricea laxa</u>	over 30 m.	Caribbean, South Florida	Uncommon	South Florida	Moderate
<u>Pseudoplexaura crucis</u>	over 30 m.	Caribbean, South Florida	Uncommon	South Florida	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Lophogorgia</u> <u>cardinalis</u>	30 m.	Caribbean, South Florida	Uncommon	South Florida	Moderate

Hydrocorallinian hydrozoans:

Stinging corals <u>Millepora</u> <u>albicornis</u>	Coral reefs	Caribbean, South Florida	Common	South Florida	Moderate
<u>Millepora</u> <u>complanata</u>	Coral reefs	Caribbean, South Florida	Common	South Florida	Moderate

Fishes:

Nurse shark, ging- <u>lymstoma cirriatum</u>	Open ocean- occasionally inshore	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
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Odontaspidae Sand tiger <u>Odontaspis taurus</u>					Minimal
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White shark <u>carcharodon</u> <u>carcharias</u>	Open ocean- occasionally nearshore	Atlantic and Gulf coasts	Uncommon	New England to Mexico	Minimal
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Shortfin mako <u>Lsurus oxyrinchus</u>	Open ocean- occasionally nearshore	Atlantic and Gulf coasts	Uncommon	New England to Mexico	Minimal
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Silky shark <u>Carcharhinus</u> <u>falciformis</u>	Offshore occasionally inshore	Atlantic and Gulf coasts	Uncommon	New England to Texas	Minimal
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Bull shark <u>Carcharhinus</u> <u>leucas</u>	Open ocean- common inshore	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
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Blacktip shark <u>Carcharhinus</u> <u>limbatus</u>	Open ocean and inshore waters	Atlantic and Gulf coasts	Common	New England to Texas	
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Sandbar shark <u>Carcharhinus</u> <u>milberti</u>	Open ocean- sometimes inshore	Atlantic coast	Uncommon	New England to Florida	Minimal
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Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Dusky shark <u>Carcharhinus</u> <u>obscurus</u>	Open ocean- sometimes inshore	Atlantic and Gulf coasts	Uncommon	Maine to Florida	Minimal
Reef shark <u>Carcharhinus</u> <u>springeri</u>	Open ocean and inshore waters	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
Tiger shark <u>Galeocerdo</u> <u>cuvieri</u>	Open ocean and inshore waters	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
Smooth dogfish <u>Mustelus canis</u>	Open ocean and inshore waters	Atlantic coast	Common	Cape Cod to Florida	Minimal
Lemon shark <u>Negaprion</u> <u>brevirostris</u>	Inshore-sometimes entering brackish waters	Atlantic and Gulf coasts	Common	North Caro- lina to Florida	Minimal
Atlantic sharpnose shark, <u>Rhizopriono-</u> <u>don terraenoriae</u>	Shallow coastal waters	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
SPHYRNIDAE					
Scalloped hammer- head, <u>Sphyrna</u> <u>lewini</u>	Open ocean and coastal waters	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
Great hammerhead <u>Sphyrna mokarran</u>	Open ocean and coastal waters	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
Bennethead <u>Sphyrna tiburo</u>	Shallow coastal waters	Atlantic and Gulf coasts	Common	New England to Texas	
Smooth hammerhead <u>Sphyrna zygaena</u>	Open ocean and coastal waters	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
RHINOBATIDAE					
Atlantic guitarfish <u>Rhinobatos</u> <u>lentiginosus</u>	Inshore sandy areas	Atlantic and Gulf coasts	Locally common	North Caro- lina to Fla.	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
TORPEDINIDAE					
Lesser electric ray, <u>Narcine</u> <u>brasiliensis</u>	Sandy beaches	Atlantic and Gulf coasts	Common on Gulf coast	North Caro- lina to Texas	Minimal
RAJIDAE					
Clearnose skate <u>Raja eglanteria</u>	Moderately deep water in sandy	Atlantic coast	Uncommon	Maine to Florida	Minimal
DASYATIDAE					
Southern stingray <u>Dasyatis</u> <u>americana</u>	Shallow coastal waters	Atlantic and Gulf coasts	Common	New Jersey to Texas	Minimal
Atlantic stingray <u>Dasyatis</u> <u>sabina</u>	Coastal streams and estuaries, sometimes into fresh water	Atlantic coast	Uncommon	Chesapeake Bay to Florida	Minimal
Yellow stingray <u>Urolophus</u> <u>jamaicensis</u>	Shallow coastal waters	Atlantic and Gulf coasts	Common	North Carolina to Texas	Minimal
MYLIOBATIDAE					
Spotted eagle ray <u>Aetobatus narinari</u>	Coastal waters	Atlantic and Gulf coasts	Common	Chesapeake Bay to Texas	Minimal
Cownose ray <u>Rhinoptera bonasus</u>		Atlantic and Gulf coasts	Common	New England to Texas	Minimal
MOBULIDAE					
Atlantic manta <u>Manta birostris</u>	Open ocean-occa- sionally inshore	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
Ladyfish <u>Elops saurus</u>	Coastal waters, mangroves, estu- aries, marshes, rivers, & canals	Coastal waters on both coasts	Common	New England to Texas	Minimal
Tarpon <u>Megalops</u> <u>atlantica</u>	Coastal waters, mangroves, estua- ries, marshes, rivers and canals	Coastal waters on both coasts	Very common	New England to Texas	Min-mal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<b>MURAENIDAE</b>					
Chain moray <u>Echidna catenata</u>	Shallow water, rocky or rock and sand situations	Atlantic coasts	Uncommon	Fla. Keys	Severe
Viper moray <u>Enchelycore</u> <u>nigricans</u>	Shallow water, rock or coral bottom	Atlantic coasts	Common	Fla. Keys	Severe
Green moray <u>Gymnothorax</u> <u>funnebris</u>	Shallow to deep waters in rocky or coral bottoms	Atlantic coasts	Common	So. Fla. and Keys	Severe
Spotted moray <u>Gymnothorax</u> <u>moringa</u>	Reef, rocky, or turtle grass areas in waters less than 50 feet	Atlantic and Gulf coasts	Common	North Caro- lina to Florida	Severe
Purplemouth moray <u>Gymnothorax</u> <u>vicinus</u>	Rocky bottom habitat and deep water	Atlantic coasts	Uncommon	Fla. Keys	Severe
Goldentail moray <u>Muraena</u> <u>millaris</u>	Patch reefs or rock shorelines- shallow or deep waters	Atlantic coasts	Common	Fla. Keys	Severe
<b>CONGRIDAE</b>					
Bandtooth conger <u>Ariosoma impressa</u>	Grassy or sandy bottoms	Atlantic and Gulf coasts	Common	North Caro- lina to Mexico	Severe
Manytooth conger <u>Conger triporiceps</u>	Sand bottom shal- low to deep water	Atlantic coasts		Florida	Moderate
Garden eel <u>Nyctactichthys</u> <u>nalis</u>	Bare sand bottoms	South Fla.	Locally common	Florida	Moderate
Margintail conger <u>Paraconger</u> <u>caudilimbatus</u>	Shallow to deep water on sandy bottoms	Atlantic and Gulf coasts		Florida	Moderate

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OPHICHTHIDAE					
Key worm eel <u>Ahlia egmontis</u>	Tidal creeks, bays, also coral reefs in surround- ing sandy areas	Atlantic and Gulf coasts	Common	Florida	Moderate
Sharptail eel <u>Myrichthys</u> <u>accuminatus</u>	Coastal grassy areas	Atlantic coast	Common	Florida	Minimal
Speckled worm eel <u>Myrophis</u> <u>punctatus</u>	Tidal creeks and semi-protected bays	Atlantic and Gulf coasts	Common	Carolinas to Mexico	Minimal
Surf eel <u>Sphagebranchus</u> <u>ophioneus</u>	Semi-protected bays or just out- side surfline	Atlantic coast	Common	Florida	Minimal
Yellowfin menhaden <u>Brevoortia smithi</u>					Minimal
Atlantic menhaden <u>Brevoortia</u> <u>tyrannus</u>	Coastal waters and rivers	Atlantic and Gulf coasts	Abundant	New England to Texas	Minimal
Redear sardine <u>Harengula</u> <u>humeralis</u>	Shallow coastal waters	Both coasts of So. Florida	Abundant	So. Fla.	Minimal
Scaled sardine <u>Harengula</u> <u>pensacolae</u>	Shallow coastal waters	Both coasts of central and south Florida	Abundant	So. Fla. to Texas	Minimal
Dwarf herring <u>Jenkinsia</u> <u>lamprotaenia</u>	Coastal waters	Both coasts of so. Florida	Locally abundant	So. Fla.	Minimal
Atlantic thread herring, Opis- <u>thonema oglinum</u>	Open ocean and coastal waters	Atlantic and Gulf coasts	Very abundant	New England to Texas	Minimal



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Spanish sardine <u>Sardinella</u> <u>anchovia</u>	Coastal waters	Atlantic and Gulf coasts	Uncommon	Cape Cod to Texas	Minimal
Striped anchovy <u>Anchoa hepsetus</u>	Coastal waters	Atlantic coast	Abundant	Cape Cod to Fla.	Minimal
Bigeye anchovy <u>Anchoa lamprotaenia</u>	Coastal waters	Both coasts	Uncommon	Florida	Minimal
Dusky anchovy <u>Anchoa lyolepis</u>	Coastal waters	South Fla.	Locally abundant	Florida	Minimal
Bay anchovy <u>Anchoa mitchilli</u>	Coastal waters	Atlantic and Gulf coasts	Locally abundant	Maine to Texas	Minimal
Flat anchovy <u>Anchoviella</u> <u>pertasciata</u>	Coastal waters	Atlantic coast	Common	New York to Fla.	Minimal
MYCTOPHIFORMES SYNODONTIDAE					
Shortjaw lizardfish <u>Saurida normani</u>	Deep-water between 60-100 fathoms	Atlantic and Gulf coasts	Uncommon	Florida	
Inshore lizardfish <u>Synodus foetens</u>	Shallow water	Atlantic and Gulf coasts	Common	New England to Mexico	
Sand diver <u>Synodus</u> <u>intermedius</u>	Shallow water in sandy areas around boulders or patch reefs	Atlantic and Gulf coasts	Common	Carolina to Mexico	Moderate
Red lizardfish <u>Synodus Synodus</u>	Coves, small bays or deep water, around patch reefs and coral heads	Atlantic and Gulf coasts	Very common	Florida to Mexico	Moderate
Snakefish <u>Trachinocephalus</u> <u>mvops</u>	Shallow water with sandy bottom	Atlantic and Gulf coasts	Common	New England to Mexico	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
ARIIDAE					
Sea catfish <u>Arius felis</u>	Along shoreline or inhabiting bays, rivers and estua- rines	Atlantic and Gulf coasts	Common	Cape Cod to Texas	Minimal
Gafftopsail catfish <u>Bagre marinus</u>	Along shorelines in bays and rivers	Atlantic coasts	Common	Cape Cod to Fla.	Minimal
BATRACHOIDIFORMES BATRACHOIDIDAE					
Gulf toadfish <u>Opsanus beta</u>	Coastal waters and rivers	Atlantic and Gulf coasts	Common	Florida	Minimal
Leopard toadfish <u>Opsanus pardus</u>	Coastal waters, rivers and estua- rines	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
Oyster toadfish <u>Opsanus tau</u>	Coastal waters, rivers and estua- rines	Atlantic coast	Common	Maine thru Florida	Minimal
Atlantic midship- man <u>Porichthys</u> <u>porosissimus</u>	Coastal waters, rivers and estua- rines	Atlantic and Gulf coasts	Common	So. Carolina to Texas	Minimal
GOBIESOCIFORMES GOBIESOCIDAE					
Emerald clingfish <u>Acyrtops berylline</u>	Shallow water grass beds	Atlantic coast	Common	Florida	Moderate
Skilletfish <u>Gobiesox</u> <u>strumosus</u>	Found in waters surrounding pilings, rocks, shells, etc.	Atlantic and Gulf coasts	Common	Chesapeake Bay to Mexico	Moderate
LOPHIIFORMES ANTENNARIIDAE					
Ocellated frogfish <u>Antennarius</u> <u>Ocellatus</u>	Patch and coral reefs and grass beds	Atlantic and Gulf coasts	Uncommon	Florida	

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Dwarf frogfish <u>Antennarius</u> <u>pauciradiatus</u>	Patch and coral reefs and grass beds	Atlantic coast	Common	Florida	Severe
Sargassumfish <u>Histrio histrio</u>	Found in drifting sargassum weed	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
OGCOCEPHALIDAE					
Pancake batfish <u>Halieutichthys</u> <u>aculeatus</u>	Moderately deep water on bare sand bottom	Atlantic and Gulf coasts	Common	Carolinas thru Fla.	Moderate
Shortnose batfish <u>Ogcocephalus</u> <u>nasutus</u>	Shallow to deep water on open sand flats	Atlantic coasts	Very Common	Florida	Moderate
Polka-dot batfish <u>Ogcocephalus</u> <u>radiatus</u>	Shallow to deep water sandy areas	Atlantic and Gulf coasts	Uncommon	Florida Keys	Moderate
GADIFORMES					
GADIDAE					
Southern hake <u>Urophycis</u> <u>floridanus</u>					
OPHIIDIIDAE					
Longnose cusk-eel <u>Ophidion beani</u>	Deep water sand and rock areas	Gulf coast	Uncommon	Florida	Moderate
Bank cusk-eel <u>Ophidion</u> <u>holbrooki</u>	Shallow or deep water sand or rock areas	Gulf coast	Uncommon	Florida	Moderate
Crested cusk-eel <u>Ophidion walsbyi</u>	Offshore in sand or rock areas	Gulf coast	Uncommon	Florida to Texas	Moderate
ATHERINIFORMES					
EXOCESTIDAE					
Hardheaded halfbeak <u>Chirocentrus</u> <u>atherinoides</u>	Found inshore, ventures into freshwater rivers and lakes	Atlantic coast	Common	Florida	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Atlantic flyingfish <u>Cypselurus</u> <u>heterurus</u>	Offshore sometimes venturing inshore	Atlantic and Gulf coasts	Very Common	New England to Mexico	Minimal
Flying halfbeak <u>Euleptorhamphus</u> <u>velox</u>	Offshore-surface dwelling	Atlantic Coast	Common	New England to Florida	Minimal
Balao <u>Hemiramphus balao</u>	Inshore surface dwelling	Atlantic and Gulf coast	Very Common	New England to Mexico	Minimal
Ballyhoo <u>Hemiramphus</u> <u>brasiliensis</u>	Inshore surface dwelling	Atlantic and Gulf coasts	Very Common	New England to Mexico	Minimal
Halfbeak <u>Hyporhamphus</u> <u>unifasciatus</u>	Offshore surface dwelling	Atlantic coast	Common	New England to Florida	Minimal
Sailfin flyingfish <u>Parexocoetus</u> <u>brachypterus</u>	Open offshore waters	Atlantic coast	Common	New England to Florida	Minimal
Bluntnose flyingfish <u>Prognichthys</u> <u>gibbifrons</u>	Open offshore waters	Atlantic coast	Uncommon	New England to Florida	Minimal
BELONIDAE					
Flat needlefish <u>Ablennes hians</u>	Offshore, occa- sionally inshore	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Reeltail needlefish <u>Platybelone argalus</u>	Offshore, seldom taken inshore	Atlantic and Gulf coasts	Common	Carolina to Mexico	Minimal
Atlantic needlefish <u>Strongylura</u> <u>marina</u>	Inshore and coast- al waters-brackish and fresh water	Atlantic and Gulf coasts	Abundant	Maine to Texas	Minimal
Redfin needlefish <u>Strongylura</u> <u>notata</u>	Found inshore, around wharves and tidal creeks	Atlantic and Gulf coasts	Very Common	Florida to Mexico	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Timucu</u> <u>Strongylura</u> <u>timucu</u>	Found inshore in tidal creeks, may ascend into fresh water rivers and lakes	Atlantic and Gulf coasts	Abundant	New England to Mexico	Minimal
<u>Houndfish</u> <u>Tylosurus</u> <u>crocodilus</u>	Open ocean waters	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
CYPRINODONTIDAE					
<u>Marsh killifish</u> <u>Fundulus</u> <u>confluentes</u>	Brackish estuarine and tidal fresh water areas	Atlantic and Gulf coasts	Common	Florida through Texas	Minimal
<u>Mummichog</u> <u>Fundulus</u> <u>heterolitus</u>	Bays, salt marshes weedy places close to shore	Atlantic and Gulf coasts	Abundant	New England to Mexico	Minimal
<u>Striped killifish</u> <u>Fundulus</u> <u>maialis</u>	Found in bays and marshes	Atlantic coast	Common	Cape Cod to Florida	Minimal
<u>Longnose killifish</u> <u>Fundulus</u> <u>similis</u>	Shallow brackish water inlets and streams	Gulf coast	Abundant	Gulf states	
ATHERINIDAE					
<u>Reef silverside</u> <u>Allanetta</u> <u>harringtonensis</u>	Salt and brackish water inlets and estuarine areas	Atlantic coast	Uncommon	South Florida	Minimal
<u>Hardhead silver-</u> <u>side, Atherinomo-</u> <u>rus stipes</u>	Salt and brackish water inlets and estuarine areas	Atlantic coast	Common	Florida	Minimal
<u>Rough silverside</u> <u>Membras</u> <u>martinica</u>					Minimal
<u>Tidewater silver-</u> <u>side, Menidia</u> <u>berv-</u> <u>illina</u>	Brackish waters occasionally in- tering fresh water	Atlantic and Gulf coasts	Common	New England to Missis- sippi	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
BRYCIFORMES					
HOLOCENTRIDAE					
Squirrelfish <u>Holocentrus</u> <u>ascensionis</u>	Found in shallow water in coral or rocky areas	Atlantic and Gulf coasts	Common in So. Fla.	Florida to Mexico	Severe
Deepwater squirrel- fish <u>Holocentrus</u> <u>bullisi</u>	Deep water coral or rock overhangs or reefs	Atlantic coast	Uncommon	Florida	Severe
Reef squirrelfish <u>Holocentrus</u> <u>coruscus</u>	Shallow water, sand coral or rocky bottom	Atlantic coast	Common	Florida	Moderate
Longspine squir- relfish, <u>Holocen-</u> <u>trus rufus</u>	Shallow or deep water coral or rock reefs	Atlantic coast	Common locally	Carolinas through Florida	Severe
Dusky squirrelfish <u>Holocentrus</u> <u>vexillarius</u>	Shallow water coral and rock reefs and rocky tide pools	Atlantic and Gulf coasts	Common in Florida	New Jersey to Mexico	Moderate
Blackbar soldier- fish, <u>Myripristis</u> <u>jacobus</u>	Shallow water coral and rock reefs and overhangs	Atlantic and Gulf coasts	Common	Florida	Moderate
Cardinal soldier- fish, <u>Plectrypons</u> <u>retrospinis</u>	Shallow or deep water coral or patch reefs	Atlantic	Uncommon	Florida	Severe
GASTEROSTEIFORMES					
SYNGNATHIDAE					
Whitenose pipefish <u>Corythoichthys</u> <u>albirostris</u>	Shallow water grass beds	Atlantic	Uncommon	Florida	Minimal
Crested pipefish <u>Corythoichthys</u> <u>brachycephalus</u>	Shallow water grass beds	Atlantic	Common	Florida	Minimal
Lined seahorse <u>Hippocampus</u> <u>erectus</u>	Reefs and grass beds	Atlantic and Gulf coasts	Common	Nova Scotia to Fla.	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Dwarf seahorse <u>Hippocampus</u> <u>zosteræ</u>	Shallow water grass beds	Atlantic and Gulf coasts	Very common on Florida's west coast	Florida	Minimal
Fringed pipefish <u>Micrognathus</u> <u>crinigerus</u>	Shallow water reefs and grass beds	Atlantic and Gulf coasts	Uncommon	South Florida	Minimal
Insular pipefish <u>Micrognathus</u> <u>crinitus</u>	Shallow water grass beds	Atlantic coast	Common in So. Fla. and Keys	Florida	Minimal
Banded pipefish <u>Micrognathus</u> <u>vittatus</u>	Patch or coral reefs or grass beds	Atlantic and Gulf coasts	Common	Florida	Minimal
Shortfin pipefish <u>Syngnathus</u> <u>elucens</u>	Coral or rocky areas and grass beds	Atlantic	Uncommon	Florida	Moderate
Dusky pipefish <u>Syngnathus</u> <u>floridæ</u>	Coral or rocky areas and grass beds	Atlantic and Northern Gulf coast	Common	Chesapeake Bay thru Florida	Moderate
Chain pipefish <u>Syngnathus</u> <u>louisianæ</u>	Rock and grass areas	Atlantic and Gulf coasts	Common	Virginia to Texas	Moderate
Sargassum pipefish h <u>Syngnathus</u> <u>pelagicus</u>	Found in sargassum weeds	Atlantic and Gulf coasts	Common	Maine to Mexico	Minimal
Gulf pipefish <u>Syngnathus</u> <u>scorelli</u>	Rock and grass areas	Gulf of Mexico	Uncommon in Florida waters	Florida to Mexico	Minimal
Bull pipefish <u>Syngnathus</u> <u>springeri</u>	Rock and grass areas	Atlantic and Gulf coasts	Common	So. Carolina to Florida	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
PERCIFORMES					
CENTROPOMIDAE					
Fat snook <u>Centropomus</u> <u>parallelus</u>	Salt water & fresh water canals leading to Lake Okeechobee	South Florida	Uncommon	Florida	Minimal
Tarpon snook <u>Centropomus</u> <u>pectinatus</u>	Salt water and fresh water canals leading to Lake Okeechobee	South Florida	Uncommon	Florida	Minimal
Snook <u>Centropomus</u> <u>undecimalis</u>	Offshore or in fresh water rivers; pre- fers estuarine mangrove areas	Atlantic and Gulf coasts	Common in So. Fla.	So. Carolina to Mexico	Minimal
SERRANIDAE					
Mutton hamlet <u>Alphesthes</u> <u>afer</u>	Shallow water sand rock and grass bottom	Atlantic coast	Common	Florida	Minimal
Southern sea bass <u>Centropristis</u> <u>melana</u>					Minimal
Rock sea bass <u>Centropristis</u> <u>philadelphica</u>	Found in rocky shores	Atlantic coast	Common	South Carolina to Florida	Minimal
Black sea bass <u>Centropristis</u> <u>striata</u>	Shallow or deep water over rocky bottoms	Atlantic coast	Common	Maine to Florida	Minimal
Coney <u>Cephalopholis</u> <u>fulva</u>	Shallow or deep water coral or rocky areas	Atlantic and Gulf coasts	Common	Florida to Mexico	Minimal
Sand perch <u>Diplectrum</u> <u>formosum</u>	Found in shallow water in holes formed in coral or rock reefs	Atlantic and Gulf coasts	Common	North Caro- lina to Florida	Severe



Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Rock hind <u>Epinephelus</u> <u>adscensionis</u>	Shallow water coral reefs	Atlantic and Gulf coasts	Common	New England to Florida	Severe
Speckled hind <u>Epinephelus</u> <u>drummondhayi</u>	Deep water rock or coral areas	Atlantic and Gulf coasts	Common	So. Carolina to Florida	Severe
Yellowedge grouper <u>Epinephelus</u> <u>flavolimbatus</u>	Shallow or deep water coral or rock areas	Atlantic and Gulf coasts	Uncommon	Florida	Severe
Redhind <u>Epinephelus</u> <u>guttatus</u>	Shallow or deep water coral and rock areas	Atlantic and Gulf coasts	Common	No. Carolina to Florida	Severe
Jewfish <u>Epinephelus</u> <u>Itajara</u>	Shallow or deep water around piling ledges and coral growths	Atlantic and Gulf coasts	Common	Florida	Severe
Red grouper <u>Epinephelus</u> <u>morio</u>	Shallow or deep water rock or coral reefs	Atlantic and Gulf coasts	Common	New England to Mexico	Severe
Misty grouper <u>Epinephelus</u> <u>mystacinus</u>	Deep water rock and coral ledges	Atlantic coast	Uncommon	Florida	Severe
Marsaw grouper <u>Epinephelus</u> <u>nigritus</u>					Severe
Snowy grouper <u>Epinephelus</u> <u>niveatus</u>	Shallow and deep water coral and rock formation	Atlantic and Gulf coasts	Common	New England through Florida	Severe
Nassau grouper <u>Epinephelus</u> <u>striatus</u>	Shallow water reefs and rock formations	Atlantic and Gulf coasts	Common	No. Carolina to Florida	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Black grouper <u>Mycteroperca</u> <u>bonaci</u>	Shallow water reefs and grass beds	Atlantic and Gulf coasts	Common in Florida	New England to Fla.	Severe
Yellowmouth grouper <u>Mycteroperca</u> <u>interstitialis</u>	Shallow water reefs and grass beds	Atlantic coast	Common	New England through Florida	Severe
Gag <u>Mycteroperca</u> <u>microlepis</u>	Coral and rock reefs and grass beds	Atlantic and Gulf coasts	Abundant	No. Carolina through Florida	Moderate
Scamp <u>Mycteroperca</u> <u>phenax</u>	Coral and rock reefs and grass beds	Atlantic and Gulf coasts	Common in Florida Keys	New England through Florida	Severe
Tiger grouper <u>Mycteroperca</u> <u>tigris</u>	Shallow or deep water reefs and grass beds	Atlantic and Gulf coasts	Uncommon	South Florida	Severe
Yellowfin grouper <u>Mycteroperca</u> <u>venenosa</u>	Coral or rock reefs and ledges	Atlantic and Gulf coasts	Common	Florida	Severe
Creole-fish <u>Paranthias</u> <u>furcifer</u>	Shallow or deep water reefs	Atlantic coast	Uncommon	Florida	Severe
Lautern bass <u>Serranus</u> <u>baldwini</u>	Shallow or deep water seagrass beds	Atlantic coast	Common	So. Fla.	
Tobacco fish <u>Serranus</u> <u>tabacarius</u>	Shallow or deep water coral reefs	Atlantic coast	Common	So. Fla.	Severe
Harlequin bass <u>Serranus</u> <u>tigrinus</u>	Shallow or deep water grass beds or coral and rock formations	Atlantic coast	Common	So. Fla.	Moderate
Chalk bass <u>Serranus</u> <u>tortugarum</u>	Deep water coral and rock reefs	Atlantic coast	Common at depth approx. 150 ft.	So. Fla.	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
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#### GRAMMISTIDAE

Freckled soapfish <u>Rypticus</u> <u>bistrispinus</u>	Shallow water rocky sand bottom	Atlantic coast	Common	So. Fla.	Moderate
Whitespotted soap- fish <u>Rypticus</u> <u>maculatus</u>	Moderate depths over sand bottoms	Atlantic and Gulf coasts	Common	No. Carolina to Texas	Moderate
Greater soapfish <u>Rypticus</u> <u>saponaceus</u>	Shallow coastal waters, coral and rock reefs and ledges	Atlantic coast	Common	So. Fla.	Moderate
Spotted soapfish <u>Rypticus</u> <u>subbifrenatus</u>	Shallow water around coral and rock reefs	Atlantic coast	Common	So. Fla.	Moderate

#### PRIACANTHIDAE

Bigeye <u>Priacanthus</u> <u>arenatus</u>	Moderate depths over reefs	Atlantic and Gulf coasts	Uncommon	New England through Florida	Severe
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#### APOGONIDAE

Bridle cardinalfish <u>Apogon</u> <u>aurolineatus</u>	Deep water coral reefs	Atlantic and Gulf coasts	Uncommon	Florida	Severe
Barred cardinalfish <u>Apogon</u> <u>binotatus</u>	Shallow water hedges and reefs	Atlantic coast	Common	Florida	Severe
Whitestar cardinal- fish, <u>Apogon</u> <u>lachneri</u>	Shallow water hedges and reefs	Atlantic coast	Common	So. Fla.	Severe
Flamefish <u>Apogon</u> <u>maculatus</u>	Shallow water hedges coral or patch reefs	Atlantic and Gulf coasts	Common in South Florida	New England through Florida	Severe
Twospot cardinal- fish, <u>Apogon</u> <u>pseudomaculatus</u>	Shallow or deep water reefs and rock outcrops	Atlantic and Gulf coasts	Uncommon	New England through Florida	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Sawcheek cardinal- fish, <u>Apozon</u> <u>quadrisquamatus</u>	Shallow water patch reefs	Atlantic coast	Common	Florida	Severe
Belted cardinalfish <u>Apozon townsendi</u>	Shallow or deep water patch reefs	Atlantic coast	Common	Florida	Severe
Blackfin cardinal- fish <u>Astrapogon</u> <u>puncticulatus</u>	Shallow water variety of shelter rocks, ledges, shells, etc.	Atlantic coast	Common	Florida	Severe
Conch fish <u>Astrapogon</u> <u>stellatus</u>	Lives in the mantle cavity of live queen conchs	Atlantic coast	Common in Keys	So. Fla. through Keys	Severe
Freckled cardinal- fish, <u>Phaeoptyx</u> <u>conklini</u>	Shallow and deep water patch reefs	Atlantic coast	Common	So. Fla.	Severe
POMATOMIDAE					
Bluefish <u>Pomatomus</u> <u>saltatrix</u>	Open ocean and along shoreline	Atlantic coast	Common	New England through Florida	Minimal
RACHYCENTRIDAE					
Cobia <u>Rachycentron</u> <u>canadum</u>	Open ocean	Atlantic and Gulf coasts	Common	New England through Mexico	Minimal
ECHENEIDAE					
Sharksucker <u>Echeneis naucrates</u>	Inshore free swim- ming or attached to a large fish	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Whitefin shark- sucker <u>Echeneis</u> <u>neucratoides</u>	Inshore attached to large fish	Atlantic and Gulf coasts	Uncommon	New England to Mexico	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Slender suckerfish <u>Enteichthys</u> <u>lineatus</u>	Open ocean, usually attached to barra- cuda	Atlantic coast	Uncommon	So. Carolina to Florida	Minimal
Spearfish remora <u>Remora</u> <u>brachyoptera</u>	Open ocean usually found on swordfish	Atlantic coast	Common	Maine to Florida	Minimal
Marlinsucker <u>Remora osteachir</u>	Open ocean found on various types of billfish	Atlantic coast	Common	Cape Cod to Florida	Minimal
Remora <u>Remora remora</u>	Offshore found attached to large fish and fre- quently on sea turtles	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
CARANGIDAE					
African pompano <u>Alectis crinitus</u>	Open ocean fre- quents holes in sea bottom	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Yellow jack <u>Caranx</u> <u>bartholomaei</u>	Open ocean usually found around floating sargassum beds	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Blue runner <u>Caranx crysos</u>	Found inshore or offshore	Atlantic and Gulf coasts	Common	Maine to Mexico	Minimal
Creville jack <u>caranx hippos</u>	Found inshore along beaches and around river mouths	Atlantic coast	Common	New England through Florida	Minimal
Horse-eye jack <u>Caranx latus</u>	Found inshore along beaches and in coastal streams	Atlantic coast	Common	Virginia through Florida	Minimal
Bar jack <u>Caranx ruber</u>	Found inshore along beaches and off- shore in open water	Atlantic and Gulf coasts	Common	New Jersey through Florida	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Atlantic bumper <u>Chloroscombrus</u> <u>chrysurus</u>	Found inshore and in tidal streams and estuaries	Atlantic coast	Common	Cape Cod through Florida	Minimal
Round scad <u>Decapterus</u> <u>punctatus</u>	Open coastal waters	Atlantic and Gulf coasts	Common	Maine to Texas	Minimal
Rainbow runner <u>Elagatis</u> <u>bipinnulata</u>	Open coastal waters	Atlantic and Gulf coast	Common	Maine to Texas	Minimal
Bluntnose jack <u>Hemicaranx</u> <u>amblyrhynchus</u>	Open waters, some- times found under jellyfish	Atlantic and Gulf coasts	Uncommon	Cape Hatteras to Texas	Minimal
Leather jacket <u>Oligoplites</u> <u>saurus</u>	Open coastal waters, bays and estuarines	Atlantic and Gulf coasts	Common	New York through Texas	Minimal
Bigeye scad <u>Selar</u> <u>crumenophthalmus</u>	Open coastal waters	Atlantic and Gulf coasts	Common	Cape Cod to Texas	Minimal
Lookdown <u>Selene</u> <u>vomer</u>	Inshore waters around reefs and jetties	Atlantic and Gulf coasts	Common	New England through Texas	Minimal
Greater amberjack <u>Seriola dumerili</u>	Open waters offshore	Atlantic and Gulf coasts	Common	New England to Texas	Minimal
Almaco jack <u>Seriola rivoliana</u>	Open waters offshore	Atlantic and Gulf coasts	Common	New Jersey to Texas	Minimal
Banded rudderfish <u>Seriola zonata</u>	Open coastal waters	Atlantic and Gulf coasts	Common	Cape Cod to Fla.	Minimal
Florida pompano <u>Trachinotus</u> <u>carolinus</u>	Coastal waters and rivers	Atlantic and Gulf coasts	Common	Cape Cod through Texas	Minimal
Permit <u>Trachinotus</u> <u>falcatus</u>	Shallow water flats, bays and coves	Atlantic and Gulf coasts	Common in So. Fla.	New England through Texas	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Palometta</u> <u>Trachinotus</u> <u>goodei</u>	Found in surf zone and around shallow water reefs	Atlantic and Gulf coasts	Common	New England through Texas	Minimal
Rough scad <u>Trachurus lathami</u>	Open coastal waters	Atlantic coast	Common in So. Fla.	New England to Fla.	Minimal
Atlantic moonfish <u>Vomer setapinnis</u>	Open coastal waters and rivers	Atlantic coast	Common	Cape Cod to Fla.	Minimal
CORYPHAENIDAE					
Pompano dolphin <u>Coryphaena</u> <u>equisetis</u>	Open offshore waters	Atlantic and Gulf coasts	Common	New Jersey to Texas	Minimal
Dolphin <u>Coryphaena</u> <u>hippurus</u>	Open offshore waters	Atlantic and Gulf coasts	Common	New England through Texas	Minimal
LUTJANIDAE					
Mutton snapper <u>Lutjanus analis</u>	Tidal creeks and bights surrounded by mangroves	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Schoolmaster <u>Lutjanus</u> <u>apodes</u>	Mangrove lined tidal creeks, tide pools and grass and marl areas	Atlantic and Gulf coasts	Common	New England to Florida	Minimal
Blackfin snapper <u>Lutjanus</u> <u>buccanella</u>	Deep water areas of sand and rock, coral reefs	Atlantic and Gulf coasts	Common	Carolinas to Florida	Moderate
Red snapper <u>Lutjanus</u> <u>campechanus</u>	Deep water coral or rock reefs and ledges	Atlantic coast	Common	Florida	Moderate
Cubera snapper <u>Lutjanus</u> <u>cvaenopterus</u>	Tidal creeks or coral and rock reefs or ledges	Atlantic coast	Uncommon	So. Fla.	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Gray snapper <u>Lutianus</u> <u>griseus</u>	Tidal creeks, rivers and estua- rine areas	Atlantic and Gulf coasts	Common	New England through Florida	Minimal
Dog snapper <u>Lutianus</u> <u>jocu</u>	Shallow water coral and rock reefs	Atlantic and Gulf coasts	Common	New England through Florida	Moderate
Mahogany snapper <u>Lutianus</u> <u>mahogani</u>	Shallow water rock and coral bottoms	Atlantic coast	Common	Carolinas through Florida	Moderate
Lane snapper <u>Lutianus</u> <u>synagris</u>	Deep water coral and rock reefs	Atlantic and Gulf coasts	Uncommon	Carolinas through Florida	Moderate
Silk snapper <u>Lutianus</u> <u>vivanus</u>	Deep water coral and rock reefs	Atlantic and Gulf coasts	Uncommon	Carolinas through Florida	Moderate
Yellowtail snapper <u>Ocuvrus</u> <u>chrysurus</u>	Open water above coral and rock reefs	Atlantic and Gulf coasts	Common	New England through Florida	Moderate
Vermillion snapper <u>Rhomboplites</u> <u>aurorubens</u>	Deep water coral and rock reefs	Atlantic and Gulf coasts	Uncommon	Carolinas through Florida	Moderate
LOBOTIDAE					
Tripletail <u>Lobotes</u> <u>surinamensis</u>	Open ocean usually found in clumps of sargassum	Atlantic and Gulf coasts	Uncommon	New England to Florida	Minimal
GERREIDAE					
Spotfin mojarra <u>Eucinostomus</u> <u>argenteus</u>	Shallow waters of rivers and estuarines	Atlantic and Gulf coasts	Common	New Jersey to Mexico	Minimal



Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Silver jenny <u>Eucinostomus gula</u>	Rivers, estuarine and tidal creeks	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Yellowfin mojarra <u>Gerrus cinereus</u>	Shallow water near shore in bays, tidal creeks, and sandy beaches	Atlantic and Gulf coasts	Common	Florida to Mexico	
POMADASYIDAE					
Black margate <u>Anisotrenus</u> <u>surinamensis</u>	Shallow water reefs, sloping rocky shorelines	Atlantic and Gulf coasts	Uncommon	Florida to Mexico	Moderate
Porkfish <u>Anisotrenus</u> <u>virginicus</u>	Shallow water coral and patch reefs, wrecks and rock rubble	Atlantic coast	Common	So. Fla.	Moderate
Margate <u>Haemulon</u> <u>album</u>	Schools around low corals and gorgo- nians; and coral and rock rubble	Atlantic coast	Common	So. Fla.	Moderate
Tomtate <u>Haemulon</u> <u>aurolineatum</u>	Found in schools over grass beds and other open areas	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Black grunt <u>Haemulon</u> <u>bonariense</u>	Shallow water reefs	Gulf coast	Common	So. Fla.	Severe
Caesar grunt <u>Haemulon</u> <u>carbonarium</u>	Shallow water and coral and rocky areas	Atlantic coast	Common in Fla. Keys	So. Fla.	Severe
Smallmouth grunt <u>Haemulon</u> <u>chrissareyeum</u>	Shallow water coral reefs	Atlantic coast	Common	Florida	Severe
French grunt <u>Haemulon</u> <u>flavolineatum</u>	Shallow water coral reefs	Atlantic and Gulf coasts	Common	So. Carolina to Mexico	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Spanish grunt <u>Haemulon</u> <u>macrostomum</u>	Coral and rock reefs patch reefs and jetties	Atlantic coast	Fairly Common	Florida	Severe
Cottonwick <u>Haemulon</u> <u>melanurum</u>	Shallow or deep water coral reefs	Atlantic coast	Uncommon	So. Fla.	Severe
Sailors choice <u>Haemulon</u> <u>parrai</u>	Coral and rock reefs sometimes found inshore	Atlantic coast	Common	Florida	Severe
White grunt <u>Haemulon</u> <u>plumieri</u>	Schools along edges of patch reefs shallow water	Atlantic and Gulf coasts	Common	Virginia to Mexico	Moderate
Bluestriped grunt <u>Haemulon</u> <u>sciurus</u>	Shallow, rocky inshore waters	Atlantic and Gulf coasts	Common	So. Carolina to Mexico	Moderate
Pigfish <u>Orthopristis</u> <u>chrysoptera</u>	Shallow or deep water coral or rock areas	Atlantic coast	Common	New England to Florida	Moderate
SPARIDAE					
Sheepshead <u>Archosargus</u> <u>probatocephalus</u>	Shallow water rocks, pilings, and jetties	Atlantic and Gulf coasts	Common	Florida to Mexico	Minimal
Sea bream <u>Archosargus</u> <u>rhomboidalis</u>	Rocky areas in shallow water	Atlantic and Gulf coasts	Common	New Jersey through Florida	Minimal
Grass porgy <u>Calamus</u> <u>arctifrons</u>	Shallow water grass beds	Gulf of Mexico	Common on West Coast of Florida	Florida to Mexico	Minimal
Jolthead porgy <u>Calamus</u> <u>hajeonado</u>	Clear water areas over reefs	Atlantic and Gulf coasts	Common in Florida	Rhode Island through Florida	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Spottail pinfish <u>Diplodus</u> <u>holbrooki</u>	Sand-mud flats in moderate depths- usually associated with vegetation	Atlantic coast and Gulf coast to Cedar Key	Common	Chesapeake Bay to Cedar Key	Moderate
Pinfish <u>Lagodon</u> <u>rhomboides</u>	Coral and rock areas jetties and pilings	Atlantic and Gulf coasts	Abundant	New England through Florida	Moderate
Red porgy <u>Pagrus</u> <u>sedecim</u>	Moderately deep water over coral or rock areas	Atlantic and Gulf coasts	Common	New York to Florida	Moderate
Congspine porgy <u>Stenotomus</u> <u>caprinus</u>	Deep waters above coral and rock bottoms	Atlantic coast	Common	Carolinas through Florida	Moderate
SCIAENIDAE					
Silver perch <u>Bairdiella</u> <u>chrysura</u>	Found along ocean shores	Atlantic and Gulf coasts	Common	New England through Texas	Minimal
Spotted seatrout <u>Cynoscion</u> <u>nebulosus</u>	Open water frequently venturing into salt marshes and rivers	Atlantic and Gulf coasts	Common	New York to Texas	Minimal
Silver seatrout <u>Cynoscion</u> <u>nothus</u>	Shallow to moder- ately deep open waters	Atlantic and Gulf coasts	Common in Gulf	Florida to Texas	Minimal
High-hat <u>Equetus</u> <u>acuminatus</u>	Shallow water coral and rock reefs and ledges	Atlantic coast	Common	Florida	Severe
Jackknife-fish <u>Equetus</u> <u>lanceolatus</u>	Shallow water, reefs, coral and rock ledges	Atlantic and Gulf coasts	Common	Carolinas through Florida	Severe
Spotted drum <u>Equetus</u> <u>punctatus</u>	Shallow water reefs and ledges	Atlantic coast	Common	Florida	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Cubbyu <u>Equetus umbrosus</u>	Shallow water coral and rock reefs	Atlantic coast	Common	Florida	Severe
Banded drum <u>Larimus fasciatus</u>	Open water tends to stay offshore	Atlantic and Gulf coasts	Uncommon	New England to Texas	Minimal
Spot <u>Lieostomus</u> <u>xanthurus</u>	Inshore and in- land waters	Atlantic and Gulf coast	Common	Cape Cod to to Texas	Minimal
Southern kingfish <u>Menticirrhus</u> <u>americanus</u>	Inshore waters, inland salt water rivers and marshes	Atlantic and Gulf coasts	Common along Fla. Atlan- tic coast	New Jersey to Texas	Minimal
Gulf kingfish <u>Menticirrhus</u> <u>littoralis</u>	Inshore waters and inland salt water rivers and marshes	Atlantic and Gulf coasts	Common in Gulf of Mexico	Chesapeake Bay to Texas	Minimal
Northern kingfish <u>Menticirrhus</u> <u>saxatilis</u>	Inshore waters and inland salt water rivers and marshes	Atlantic coast	Uncommon in Florida	New England to Florida	Minimal
Atlantic croaker <u>Micropogon</u> <u>undulatus</u>	Found on inshore waters on sandy beaches and some- times in inland waters	Atlantic and Gulf coasts	Common	New York to Texas	Minimal
Black drum <u>Pogonias</u> <u>cromis</u>	Found inshore and offshore on rock or coral areas, sometimes found inland	Atlantic and Gulf coasts	Common	New York to Mexico	Moderate
Red drum <u>Sciaenops</u> <u>ocellata</u>	Offshore venturing inland into rivers and estuarine areas	Atlantic and Gulf coasts	Common	New York to Texas	Minimal
Star drum <u>Stellifer</u> <u>lanceolatus</u>	Deep water in rocky areas	Atlantic and Gulf coasts	Common	So. Carolina to Texas	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
MULLIDAE					
Yellow goatfish <u>Mulloidichthys</u> <u>martinicus</u>	Shallow water reefs	Atlantic and Gulf coasts	Common	Florida	Moderate
Red goatfish <u>Mullus auratus</u>	Shallow water coral and patch reefs	Atlantic coast	Uncommon	Cape Cod to Florida	Moderate
Spotted goatfish <u>Pseudupeneus</u> <u>maculatus</u>	Shallow water patch reefs and grass beds	Atlantic and Gulf coasts	Uncommon	New Jersey to Mexico	Moderate
EPHIPPIDAE					
Atlantic spade- fish <u>Chaetodipterus</u> <u>faber</u>	Open ocean or in- shore around reef wrecks, bridges, etc.	Atlantic and Gulf coasts	Abundant	New England to Mexico	Minimal
CHAETODONTIDAE					
Foureye butterfly- fish <u>Chaetodon</u> <u>capistratus</u>	Found around coral reefs and rocky grass beds	Atlantic and Gulf coasts	Common	New England through Florida	Severe
Spotfin butterfly- fish <u>Chaetodon</u> <u>ocellatus</u>	Coral reef, grass beds, jetties, etc.	Atlantic and Gulf coasts	Abundant	New England to Mexico	Severe
Reef butterflyfish <u>Chaetodon</u> <u>sedentarius</u>	Coral reef rocky areas	Atlantic and Gulf coasts	Uncommon	Florida	Severe
Banded butterfly- fish <u>Chaetodon</u> <u>striatus</u>	Coral reefs, rocky and grassy areas	Atlantic and Gulf coasts	Common	New Jersey to Florida	Severe
Blue angelfish <u>Holacanthus</u> <u>bermudensis</u>	Coral reefs, rock piles, wrecks, etc.	Atlantic and Gulf coasts	Very common	Florida to Texas	Moderate
Rock beauty <u>Holacanthus</u> <u>tricolor</u>	Coral and rock reefs	Atlantic	Common	Florida	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Gray angelfish <u>Pomacanthus</u> <u>arcuatus</u>	Coral and rock reefs	Atlantic and Gulf coasts	Abundant	New England to Texas	Severe
French angelfish <u>Pomacanthus</u> <u>paru</u>	Found along coral and rock reefs and jetties along shore	Atlantic coast	Abundant	Florida	Severe
Longsnout butter- flyfish <u>Piogna-</u> <u>thodes aculeatus</u>	Offshore deep water reef	Atlantic coast	Uncommon	Florida	Severe
POMACENTRIDAE					
Sergeant major <u>Abudefduf</u> <u>saxatilis</u>	Found most every- where, reef, rock piles, ledges, wharves, etc.	Atlantic and Gulf coasts	Abundant	New England to Mexico	Minimal
Night sergeant <u>Abudefduf</u> <u>taurus</u>	Found around reef, rockpiles, wharves, etc.	Atlantic coast	Common	Florida	Moderate
Blue chromis <u>Chromis</u> <u>cyaneus</u>	Shallow or deep water reefs	Atlantic coast	Common	Florida	Moderate
Sunshine fish <u>Chromis</u> <u>insolatus</u>	Deep water coral and rock reefs, ledges, etc.	Atlantic coast	Uncommon	Florida	Moderate
Brown chromis <u>Chromis</u> <u>multilineatus</u>	Open water above patch reefs and outer edges of large reefs	Atlantic coast	Common	Florida	Moderate
Yellowtail damsel- fish <u>Microspathodon</u> <u>chrysurus</u>	Shallow water around reefs	Atlantic and Gulf coasts	Uncommon	So. Fla.	Severe
Dusky damselfish <u>Pomacentrus</u> <u>fuscus</u>	Coral and rock reefs grass beds	Atlantic and Gulf coasts	Abundant	Florida	Severe
Beaugregory <u>Pomacentrus</u> <u>leucostictus</u>	Rocky tide pools shallow water reefs, rock piles and grass beds	Atlantic and Gulf coasts	Abundant	New England through Texas	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Proje Impe
Bicolor damselfish <u>Pomacentrus</u> <u>partitus</u>	Shallow and deep water reefs	Atlantic coast	Common	Florida	Severe
Threespot damsel- fish <u>Pomacentrus</u> <u>planifrons</u>	Shallow waters, rock, sand, shell or grass bottom	Atlantic coast	Uncommon	Florida	Moderate
Cocoa damselfish <u>Pomacentrus</u> <u>variabilis</u>	Shallow water reefs, rock piles and grass beds	Atlantic and Gulf coasts	Common	So. Fla.	Moderate
LABRIDAE					
Spotfin hogfish <u>Bodianus pulchellus</u>	Deep water coral or rock reefs	Atlantic coast	Common	So. Fla.	Severe
Spanish hogfish <u>Bodianus rufus</u>	Shallow and deep water coral and rock reefs	Atlantic and Gulf coasts	Common	Florida	Severe
Creole wrasse <u>Clepticus</u> <u>parrei</u>	Open deep water above and around patch reefs	Atlantic coast central and south Florida	Common in Florida Keys	Central and South Florida	Moderate
Dwarf wrasse <u>Doratonotus</u> <u>macalepis</u>	Shallow water grass beds	Atlantic coast	Common	Florida	Moderate
Slippery dick <u>Halichoeres</u> <u>bivittatus</u>	Coral or rock reefs, rock and sand areas and grass beds	Atlantic coast	Very common in So. Fla.	North Carolina through Florida	Severe
Painted wrasse <u>Halichoeres</u> <u>caudalis</u>	Coral and rock reefs	Atlantic coast	Common	Florida	Severe
Yellowhead wrasse <u>Halichoeres</u> <u>garnoti</u>	Shallow and deep water coral and rock reefs	Atlantic coast	Common	Florida	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Clown wrasse <u>Halichoeres</u> <u>maculipinna</u>	Found in a variety of areas, coral and rock reefs and rocky grass beds	Atlantic coast	Very common	N. Carolina through Florida	Moderate
Rainbow wrasse <u>Halichoeres</u> <u>pictus</u>	Coral or rock reefs and grass beds; usually found swimming well off bottom	Atlantic coast	Common	So. Fla.	Moderate
Blackear wrasse <u>Halichoeres</u> <u>poeyi</u>	Shallow water grass beds, occasionally on coral reefs	Atlantic coast	Common	Central to South Florida	Minimal
Puddingwife <u>Halichoeres</u> <u>radiatus</u>	Shallow water rock and grassy areas	Atlantic coast	Abundant in south Florida	N. Carolina to Florida	Severe
Rosy razorfish <u>Hemipteronotus</u> <u>martinicensis</u>	Shallow water marly sand bottom	Atlantic coast	Uncommon	So. Fla. and Keys	Moderate
Pearly razorfish <u>Hemipteronotus</u> <u>noracula</u>	Rock and sand areas	Atlantic and Gulf coasts	Common in South Florida	S. Carolina through Florida	Moderate
Green razorfish <u>Hemipteronotus</u> <u>splendens</u>	Sand and grass areas	Atlantic coast	Abundant	Florida	Moderate
Hogfish <u>Lachnolaimus</u> <u>maximus</u>	Coral and rock reefs sand and grass areas	Atlantic and Gulf coasts	Common in So. Fla. and Keys	N. Carolina to Mexico	Moderate
Bluehead <u>Thalassoma</u> <u>hifasciatum</u>	Coral and rock reefs, rock and grass areas	Atlantic and Gulf coasts	Abundant in So. Fla. and Keys	Fla. to Mexico	Moderate
SCARIDAE					
Bluelip parrotfish <u>Cryptotomus</u> <u>roseus</u>	Shallow water sand and grassy area	Atlantic coast	Uncommon	Florida	Severe



Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Blue parrotfish <u>Scarus coeruleus</u>	Coral and rock reefs	Atlantic coast	Common in Fla. Keys	N. Carolina to Fla.	Severe
Striped parrotfish <u>Scarus croicensis</u>	Found congregat- ing above reefs or grass beds	Atlantic coast	Abundant in Central and Florida So. Fla.		Severe
Rainbow parrotfish <u>Scarus guacamaia</u>	Coral reefs and grass beds	Atlantic coast	Common in Keys	So. Fla.	Severe
Princess parrotfish <u>Scarus taeniopterus</u>	Coral rock reefs and grass beds	Atlantic coast	Common	So. Fla.	Severe
Queen parrotfish <u>Scarus vetula</u>	Reefs and grass beds	Atlantic coast	Common	So. Fla.	Severe
Redband parrotfish <u>Sparisoma aurofrenatum</u>	Reefs and grass beds	Atlantic coast	Common in Keys	So. Fla.	Severe
Redtail parrotfish <u>Sparisoma chrysopterum</u>	Grassy and rocky areas	Atlantic coast	Common in So. Fla.	Florida	Moderate
Bucktooth parrot- fish <u>Sparisoma radians</u>	Coral and rock reefs and grassy areas	Atlantic coast	Uncommon	So. Fla.	Severe
Redfin parrotfish <u>Sparisoma rubripinne</u>	Coral and rock reefs and grassy areas	Atlantic coast	Common in So. Fla.	New England through Florida	Severe
Spotlight parrot- fish <u>Sparisoma viride</u>	Coral reefs and grass beds	Atlantic and Gulf coasts	Common	So. Fla.	Severe
MUGILIDAE					
Striped mullet <u>Mugil cephalus</u>	Along beaches, estuaries and fresh water rivers	Atlantic and Gulf coasts	Common	Maine to Florida	Minimal
White mullet <u>Mugil curema</u>	Occurs along beaches and estuarine areas and ventur- ing into freshwater rivers	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Liza</u> <u>Mugil liza</u>	Along beaches and in estuarine areas	Atlantic coast	Common	Florida	Minimal
Pantail mullet <u>Mugil</u> <u>trichedon</u>	Along beaches and estuaries, ven- turing into rivers	Atlantic and Gulf coasts	Common	Florida to Mexico	Minimal
SPHYRAENIDAE					
Great barracuda <u>Sphyraena</u> <u>barracuda</u>	Found inshore or offshore in open water or around reefs	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Northern sennet <u>Sphyraena borealis</u>	Occurs in schools along shoreline	Atlantic coast	Common	New England to Florida	Minimal
Guaguanche <u>Sphyraena</u> <u>guaguancho</u>	Occurs along shoreline in shallow water	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
POLYNEMIDAE					
Atlantic threadfin <u>Polydactylus</u> <u>octonemus</u>	Rock and sand habitats	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
OPISTOGNATHUS					
Yellowhead jawfish <u>Opistognathus</u> <u>aurifrons</u>	Live in burrows in crushed coral or sand	Atlantic coast	Uncommon	Fla. Keys	Moderate
Moustache jawfish <u>Opistognathus</u> <u>lonchurus</u>	Deep water coral and rock reefs	Gulf coast	Uncommon	Florida	Severe
Spotfin jawfish <u>Opistognathus</u> <u>macrornathus</u>	Shallow water coral and rock reefs	Atlantic coast	Uncommon	So. Fla.	Severe
Mottled jawfish <u>Opistognathus</u> <u>maxillosus</u>	Shallow water sand bottom; lives in borrows lined with shell fragments	Atlantic coast	Uncommon	Florida	Moderate

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DACTYLOSCOPIDAE					
Sand stargazer <u>Dactyloscopus</u> <u>tridigitatus</u>	Bare sandy ex- posed beaches	Atlantic and Gulf coasts	Common around Fla. Keys	So. Fla.	Moderate
Arrow stargazer <u>Gillellus</u> <u>greyae</u>	Sand areas adja- cent to coral reefs and grass beds	Atlantic coast	Uncommon	So. Fla.	Moderate
Saddle stargazer <u>Gillellus</u> <u>rubrocinctus</u>	Sand areas adja- cent to coral reefs and grass beds	Atlantic coast	Common	Florida	Moderate
URANOSCOPIDAE					
Southern stargazer <u>Astroscopus</u> <u>y-graecum</u>	Bare sandy ex- posed beaches	Atlantic coast	Common	Cape Hatteras through Florida	Moderate
CLINIDAE					
Roughhead blenny <u>Acanthemblemaria</u> <u>aspera</u>	Coral and rock reefs	Atlantic coast	Common	Florida	Severe
Yellowfaced pikeblenny <u>Chaenopsis</u> <u>limbaughi</u>	Coral and rock reefs	Atlantic coast	Uncommon	So. Fla.	Severe
Bluethroat pike- blenny <u>Chaenopsis</u> <u>ocellata</u>	Shallow water grass beds	Atlantic coast	Uncommon	So. Fla.	Moderate
Sailfin blenny <u>Emblemaria</u> <u>pandionis</u>	Coral reefs and limestone ledges	Atlantic coast	Uncommon	So. Fla.	Severe
Roughhead triple- fin <u>Enneanectes</u> <u>hochlki</u>	Rocky bottom and patch reefs, also sloping limestone shorelines	Atlantic coast	Common	Florida	Moderate
Redeye triplefin <u>Enneanectes</u> <u>pectoralis</u>	Shallow water around limestone formations boulders and patch reefs	Atlantic coast	Common	Florida	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Puffcheek blenny <u>Labrisomus</u> <u>bucciferus</u>	Rocky areas, tide- pools patch reefs and grass beds	Atlantic coast	Common	Florida	Moderate
Mimic blenny <u>Labrisomus</u> <u>guppyi</u>	Shallow water patch and coral reefs, rock formations and tide pools	Atlantic coast	Common	Florida	Moderate
Longfin blenny <u>Labrisomus</u> <u>haitiensis</u>	Patch reefs and other coral formations	Atlantic coast	Common	Florida	Moderate
Spotcheck blenny <u>Labrisomus</u> <u>nisricinctus</u>	Coral and lime- stone formations sand and rock bottom or grass beds	Atlantic coast	Common	Florida	Severe
Harry blenny <u>Labrisomus</u> <u>nuchipinnis</u>	Patch reefs; sand and grass areas	Atlantic and Gulf coasts	Common	Florida	Severe
Goldline blenny <u>Malacoctenus</u> <u>aurelineatus</u>	Found in eroded limestone slopes, rocky tide pools or boulders in sandy or grassy areas	Atlantic coast	Common	Florida	Moderate
Rosy blenny <u>Malacoctenus</u> <u>macropus</u>	Coral or limestone formations; or rocky sand and grass areas	Atlantic coast	Common	Florida	Moderate
Saddled blenny <u>Malacoctenus</u> <u>triangulatus</u>	Patch reefs and rocky areas	Atlantic coast	Common	Florida	Moderate
Bandid blenny <u>Paraclinus</u> <u>associatus</u>	Shallow water areas of coral rock and grass	Atlantic and Gulf coast	Uncommon	Florida	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Horned blenny <u>Paraclinus</u> <u>grandicomis</u>	Found living in sponges in coral and grass areas	Atlantic coast	Common	Florida	Severe
Marbled blenny <u>Paraclinus</u> <u>marmoratus</u>	Coral and patch reefs and grass areas	Atlantic coast	Common	So. Fla.	Severe
Blackfin blenny <u>Paraclinus</u> <u>nigripinnis</u>	Coral and limestone formations, also rock and grass areas	Atlantic coast	Common	So. Fla.	Severe
Checkered blenny <u>Starksia</u> <u>ocellata</u>	Coral, rock and grass areas, often found in sponges	Atlantic and Gulf coasts	Common	No. Carolina to Alabama	Severe
Blackbelly blenny <u>Stathmenotus</u> <u>bemphitti</u>	Coral and rock ledges, also algal and grass beds	Atlantic coast	Common	So. Fla.	Severe
BLENNIIDAE					
Molly miller <u>Blennius</u> <u>cristatus</u>	Shallow rock areas, tide pools; rock and sand areas	Atlantic and Gulf coasts	Common	Florida	Minimal
Seaweed blenny <u>Blennius</u> <u>marmoreus</u>	Coral and rock reefs and grass beds	Atlantic and Gulf coasts	Common	New York to Mexico	Severe
Florida blenny <u>Chasmodes</u> <u>saburrae</u>	Shallow water rocky areas	Gulf coast	Very common in Pensa- cola Bay	Florida	Moderate
Pearl blenny <u>Entomacrodus</u> <u>nigricans</u>	Shallow water- tide pools, rocky slopes, etc.	Atlantic and Gulf coasts	Common	Florida	Moderate
Barred blenny <u>Hypoleurothilus</u> <u>bermudensis</u>	Coral and rock bottom pitted limestone and jetties	Atlantic coast	Uncommon	Florida	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Crested blenny</u> <u>Hypoleurochilus</u> <u>geminatus</u>	Shallow water coral and rock reef, grass beds and tide pools	Atlantic and Gulf coasts	Common	N. Carolina to Mexico	Severe
<u>Feather blenny</u> <u>Hypsoblennius</u> <u>hertzi</u>	Shallow water coral and rock reefs and grass beds	Atlantic coast	Common	N. Carolina through Florida	Severe
<u>Freckled blenny</u> <u>Hypsoblennius</u> <u>ionthas</u>	Shallow water coral or rocky areas; rocky tide pools and grass beds	Atlantic and Gulf coasts	Abundant	S. Carolina to Texas	Severe
<u>Redlip blenny</u> <u>Ophicoblennius</u> <u>atlanticus</u>	Coral and rock reefs tide pools and grass beds	Atlantic coast	Common	N. Carolina thorough Florida	Severe
CALLIONYMIDAE					
<u>Lancer dragonet</u> <u>Callionymus</u> <u>bairdi</u>	Shallow waters in coral or rock bottoms	Atlantic and Gulf coasts	Common in Keys	Florida	Moderate
<u>Spotted dragonet</u> <u>Callionymus</u> <u>pauciradiatus</u>	Shallow waters coral and rock areas	Atlantic coast	Common	Florida	Moderate
ELEOTRIDAE					
<u>Fat sleeper</u> <u>Dormitator</u> <u>maculatus</u>	Shallow tidal creeks sand bottom some- times found in freshwater	Atlantic and Gulf coasts	Common	N. Carolina to Florida	Minimal
<u>Spinycheek sleeper</u> <u>Electris</u> <u>risonsis</u>	Shallow tidal creeks sand and rock bottom ventures into freshwater	Atlantic coast	Common	S. Carolina through Florida	Minimal
GOBIIDAE					
<u>Bearded goby</u> <u>Barbulifer</u> <u>ceuthoecus</u>	Shallow water found under coral rock and rubble	Atlantic coast	Common	So. Fla.	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Frillfin goby</u> <u>Bathygobius</u> <u>soporator</u>	Shallow water rocky areas, or mud river bottoms	Atlantic coast	Common	Florida	Minimal
<u>Pallid goby</u> <u>Coryphopterus</u> <u>eidolon</u>	Found on coral and patch reefs in mod- erately deep water	Atlantic coast	Common	Florida	Severe
<u>Bridled goby</u> <u>Coryphopterus</u> <u>glaucofraenum</u>	Sandy areas in shallow water	Atlantic coast	Common	N. Carolina to Florida	Moderate
<u>Glass goby</u> <u>Coryphopterus</u> <u>hyalinus</u>	Deep water, coral and patch reefs	Atlantic coast	Common	So. Fla.	Severe
<u>Lyre goby</u> <u>Everthodus lyricus</u>	Shallow water coastal areas	Gulf of Mexico	Common	Fla. through Texas	Moderate
<u>Goldspot goby</u> <u>Gnatholepis</u> <u>thompsoni</u>	Shallow to moderately deep water on sand bottom with rocks and rubble	Atlantic coast	Common	Florida	Moderate
<u>Violet goby</u> <u>Gobioides</u> <u>broussoneti</u>	Shallow inshore water often ascending into rivers	Atlantic and Gulf coasts	Common in So. Fla.	Florida	Minimal
<u>Darter goby</u> <u>Gobionellus</u> <u>boleosoma</u>	Shallow water, grassy muddy bottom in bays or tidal creeks	Atlantic and Gulf coasts	Common	N. Carolina to Mexico	Minimal
<u>Sharptail goby</u> <u>Gobionellus</u> <u>hastatus</u>	Shallow inshore waters and estuaries	Atlantic and Gulf coasts	Common	N. Carolina to Mexico	Minimal
<u>Dash goby</u> <u>Gobionellus</u> <u>Saepherallens</u>	Shallow to deep water on bottoms composed of sand and fine silt	Atlantic coast	Common	Florida	Moderate
<u>Naked goby</u> <u>Gobiosoma</u> <u>bosci</u>	Shallow water in grassy bays or tidal creeks	Atlantic coast	Common	Cape Cod through Florida	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Neon goby <u>Gobiosoma</u> <u>oceanops</u>	Shallow to moderately deep water; found around coral heads or coral and rock ledges	Atlantic coast	Common	Florida	Moderate
Code goby <u>Gobiosoma</u> <u>robustum</u>	Shallow water, sandy bottoms with covering vegetation	Atlantic and Gulf coasts	Common	Central Fla. to Mexico	Moderate
Crested goby <u>Lophogobius</u> <u>cyprioides</u>	Shallow water rock and silt areas of brackish water lakes and mangrove swamps	Atlantic coast	Uncommon	Florida	Minimal
Clown goby <u>Microgobius</u> <u>gulosus</u>	Shallow water rock and sand areas	Atlantic and Gulf coasts	Common	Fla. to Texas	Moderate
Green goby <u>Microgobius</u> <u>thalassinus</u>	Shallow water rock and sand areas	Atlantic coast	Uncommon	S. Carolina through Florida	Moderate
Orange spotted goby <u>Nes longus</u>	Shallow water, in-shore or inland salt water canals and rivers	Atlantic coast	Common	Florida	Minimal

#### ACANTHURIDAE

Ocean surgeon <u>Acanthurus</u> <u>bahianus</u>	Common around reef, rocks and corals	Atlantic and Gulf coasts	Common	New England to Mexico	Moderate
Doctorfish <u>Acanthurus</u> <u>chirurgus</u>	Found in waters above reef and rock areas	Atlantic and Gulf coasts	Abundant in Fla. Atlantic coast	New England to Mexico	Moderate
Blue tang <u>Acanthurus</u> <u>coeruleus</u>	Found above and among coral and rock reef and algal beds	Atlantic and Gulf coasts	Very common So. Fla.	New York to Mexico	Moderate



Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
TRICHIURIDAE					
Atlantic cutlass- fish <u>Trichiurus</u> <u>lepturus</u>	Open waters offshore	Atlantic coast	Abundant	New England through Florida	Minimal
SCOMBRIDAE					
Wahoo <u>Acanthocybium</u> <u>solanderi</u>	Open offshore waters	Atlantic coast	Common	Florida	Minimal
Frigate mackerel <u>Auxis</u> <u>thazard</u>	Open offshore waters	Atlantic coast	Common	Cape Cod through Florida	Minimal
Little tunny <u>Euthynnus</u> <u>alletteratus</u>	Open offshore waters	Atlantic coast	Abundant	New England through Florida	Minimal
Atlantic bonito <u>Sarda Sarda</u>	Open offshore waters	Atlantic coast	Uncommon in Maine to Fla. waters	Maine to Florida	Minimal
King mackerel <u>Scomberomorus</u> <u>cavalla</u>	Open offshore waters	Atlantic coast	Abundant	Maine to Florida	Minimal
Spanish mackerel <u>Scomberomorus</u> <u>maculatus</u>	Open offshore waters	Atlantic and Gulf coast	Abundant	Maine to Mexico	Minimal
Cero <u>Scomberomorus</u> <u>regalis</u>	Ocean waters near shore	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Albacore <u>Thunnus alalunga</u>	Open water	Atlantic and Gulf coasts	Common	Florida to Mexico	Minimal
ISTIOPHORIDAE					
Sailfish <u>Istiophorus</u> <u>platypterus</u>	Open coastal waters	Atlantic coast	Common in Florida	New England to Florida	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
White marlin <u>Tetrapturus</u> <u>albidus</u>	Open coastal waters	Atlantic coast	Uncommon	New England to Florida	Minimal
STROMATEIDAE					
Spotted driftfish <u>Ariomma</u> <u>regulus</u>	Coastal waters	Atlantic and Gulf coasts	Uncommon	New Jersey to Florida	Minimal
Man-o-war fish <u>Nomeus</u> <u>gronovii</u>	Found in coastal waters among tentacles of <u>Physalia</u>	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
Harvestfish <u>Peprilus</u> <u>alepidotus</u>	Open coastal waters	Atlantic coast	Common	Cape Cod through Florida	
Butterfish <u>Peprilus</u> <u>triacanthus</u>	Deep water	Atlantic coast	Common	New England through Florida	Minimal
Freckled driftfish <u>Psenes</u> <u>cyanophrys</u>	Deep open water	Atlantic and Gulf coast	Uncommon	New England to Florida	Minimal
SCORPAENIDAE					
Goosehead scor- pionfish <u>Scorpaena</u> <u>bergi</u>	Shallow water in coral rock or grass areas	Atlantic coast	Uncommon	Florida	Severe
Barbfish <u>Scorpaena</u> <u>brasiliensis</u>	Shallow and deep water coral and rock areas	Atlantic coast	Common	Virginia to Florida	Severe
Plumed scorpion- fish <u>Scorpaena</u> <u>grandicornis</u>	Coastal waters or coral on patch reefs	Atlantic coast	Common in South Florida	New England to Florida	Severe
Mushroom scorpion- fish <u>Scorpaena</u> <u>inermis</u>	Shallow water sand and grass bottom	Atlantic coast	Uncommon	Florida	Moderate
Spotted scorpion- fish <u>Scorpaena</u> <u>plumieri</u>	Shallow water rock, sand and grass bottoms	Atlantic and Gulf coast	Very common	Massachu- setts to Mexico	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
TRIGLIDAE					
Northern searobin <u>Prionotus</u> <u>carolinus</u>	Occurs offshore in a variety of bottom habitats	Atlantic coast	Common locally	New England through Florida	Minimal
Bluespotted sea- robin <u>Prionotus</u> <u>roseus</u>	Deep water	Gulf of Mexico	Common	Florida to Texas	Minimal
Leopard searobin <u>Prionotus</u> <u>scitulus</u>	Deep coastal waters	Atlantic and Gulf coasts	Common	N. Carolina through Florida	Minimal
Bighead searobin <u>Prionotus tribulus</u>	Deep coastal waters	Atlantic and Gulf coasts	Common	New York to Mexico	Minimal
PLEURONECTIFORMES					
BOTHIDAE					
Ocellated flounder <u>Ancylopsetta</u> <u>quadrocellata</u>	Shallow water sand rock and grass areas	Atlantic and Gulf coast	Common	Florida to Mexico	Moderate
Peacock flounder <u>Bothus lunatus</u>	Shallow water sand rock and grass areas	Atlantic coast	Common	Florida	Moderate
Eyed flounder <u>Bothus ocellatus</u>	Shallow or deep water sand and rock bottom	Atlantic and Gulf coasts	Common	New York to Mexico	Moderate
Gu Gulf stream floun- der <u>Citharichthys</u> <u>arctifrons</u>	Moderate to deep waters (25+ fathoms)	Atlantic and Gulf coasts	Occasional	Carolinas to Texas	Minimal
Horned whiff <u>Citharichthys</u> <u>cornutus</u>	Moderate to deep waters (15+ fathoms)	Atlantic and Gulf coasts	Occasional	Georgia to Texas	Minimal
Spotted whiff <u>Citharichthys</u> <u>macrops</u>	Coastal waters on sand and rock bottoms	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Bay whiff <u>Citharichthys</u> <u>spilopterus</u>	Offshore on sand and rock bottoms	Atlantic coast	Common	New Jersey through Florida	Minimal
Fringed flounder <u>Etropus crossotus</u>	Coastal waters on rock and sand areas	Atlantic coast	Common	N. Carolina through Florida	Moderate
Smallmouth flounder <u>Etropus microstomus</u>	Coastal waters in sand and rock areas	Atlantic coast	Common	New York to through Florida	Moderate
Gray flounder <u>Etropus rimosus</u>	Deep water sand rock and grass bottom	Gulf coast	Common	West coast of Fla.	Minimal
Gulf flounder <u>Paralichthys</u> <u>albigutta</u>	Coastal waters rock and sand areas	Atlantic and Gulf coasts	Common	Florida	Moderate
Summer flounder <u>Paralichthys</u> <u>dentatus</u>	Coastal waters in sand and rock areas	Atlantic coast	Uncommon	Cape Cod through Florida	Moderate
Southern flounder <u>Paralichthys</u> <u>lethostigma</u>	Coastal waters in sand and rock areas	Atlantic and Gulf coasts	Common	New York through Florida	Moderate
Broad flounder <u>Paralichthys</u> <u>squamulentus</u>	Coastal waters in sand and rock areas	Atlantic and Gulf coasts	Uncommon	Florida	Moderate
SOLEIDAE					
Naked sole <u>Gymnachirus</u> <u>melas</u>	Coastal water sand and rock areas	Atlantic and Gulf coasts	Common	Carolina through Florida	
Scrawled sole <u>Trinectes</u> <u>inscriptus</u>	Coastal waters and tidal creeks on sand or rock bottom	Atlantic coast	Common	Florida	Minimal
Hogchoker <u>Trinectes</u> <u>maculatus</u>	Sand or muddy bottom in coastal waters sometimes into freshwater rivers	Atlantic and Gulf coasts	Common	Cape Ann through Florida	Minimal

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
CYNOGLOSSIDAE					
Blackcheek tongue- fish <u>Symphurus</u> <u>plagiura</u>	Coastal waters, bays and estuaries	Atlantic and Gulf coasts	Common	New York to Mexico	Minimal
TETRAODONTIFORMES BALISTIDAE					
Unicorn filefish <u>Alueterus</u> <u>monoceros</u>	Moderately deep water around rock reefs and ledges	Atlantic coast	Uncommon	New England through Florida	Moderate
Orange filefish <u>Aluterus</u> <u>schoepfi</u>	Shallow to deep water, mixed bot- tom of sand, marl, coral and coral heads	Atlantic and Gulf coasts	Fairly Common	New England through Florida	Moderate
Scrawled filefish <u>Aluterus</u> <u>scriptus</u>	Shallow water coral rock and grass areas	Atlantic and Gulf coasts	Common	New England to Mexico	Moderate
Grey triggerfish <u>Balistes</u> <u>capricornus</u>	Shallow to deep water on a variety of sand rock or coral bottoms	Atlantic and Gulf coasts	Common	Maine to Mexico	Moderate
Queen triggerfish <u>Balistes</u> <u>vetula</u>	Shallow to deep water on all types of reefs	Atlantic and Gulf coasts	Very Common in So. Fla.	New England to Mexico	Moderate
Whitespotted file- fish <u>Cantherhines</u> <u>macrocerus</u>	Shallow water in areas containing varieties of sponges	Atlantic coast	Uncommon	Florida	Moderate
Orange spotted filefish <u>Canther-</u> <u>hines pullus</u>	Shallow water in rock, coral and sponge habitats	Atlantic and Gulf coasts	Common	New England to Mexico	Severe
Rough triggerfish <u>Canthidermis</u> <u>maculatus</u>	Shallow to deep water, coral and rock ledges	Atlantic and Gulf coasts	Common	Florida	Severe

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
<u>Ocean triggerfish</u> <u>Canthidermis</u> <u>sufflamen</u>	Shallow to moder- ately deep water on coral or rock reefs and ledges	Atlantic and Gulf coasts	Common	New England through Florida	Severe
<u>Black durgon</u> <u>Melichthys niger</u>	Shallow water coral and rock reefs	Atlantic coast	Uncommon	Florida	Severe
<u>Fringed filefish</u> <u>Monacanthus</u> <u>ciliatus</u>	Shallow water around coral and rock areas, sometimes found in sargassum	Atlantic and Gulf coasts	Common	Maine to Mexico	Moderate
<u>Planehead filefish</u> <u>Monacanthus</u> <u>hispidus</u>	Shallow water around coral or rock reef and sargassum beds	Atlantic coast	Common	Maine to Florida	Moderate
<u>Pigmy filefish</u> <u>Monacanthus</u> <u>setifer</u>	Shallow water around coral reefs and grass beds	Atlantic and Gulf coasts	Common	Carolinas to Fla.	Moderate
<u>Slender filefish</u> <u>Monacanthus</u> <u>tuckeri</u>	Shallow water in grassy coves, coral slopes and patch reefs	Atlantic coast	Common	Carolinas to Fla.	Moderate
OSTRACIIDAE					
<u>Spotted trunkfish</u> <u>Lactophrys</u> <u>bicaudalis</u>	Shallow water reefs grass beds or rocky sand bottom	Atlantic and Gulf coasts	Common	Florida	Moderate
<u>Scrawled cowfish</u> <u>Lactophrys</u> <u>quadricornis</u>	Shallow water coral and patch reefs	Atlantic and Gulf coasts	Very common	New England to Mexico	Severe
<u>Trunkfish</u> <u>Lactophrys</u> <u>trigonus</u>	Shallow water coral and patch reefs & rocky bottoms	Atlantic and Gulf coasts	Common	New England to Mexico	Severe
<u>Smooth trunkfish</u> <u>Lactophrys</u> <u>triqueter</u>	Shallow water rock and sand bottom and patch reefs	Atlantic and Gulf coasts	Common	New England to Mexico	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
TETRAODONTIDAE					
Sharpnose puffer <u>Canthigaster</u> <u>rostrata</u>	Shallow water coral, rock and patch reefs and rocky tide pools	Atlantic and Gulf coasts	Very common	Florida to Mexico	Severe
Smooth puffer <u>Lagocephalus</u> <u>laevigatus</u>	Coral and patch reefs, rock and sand bottom, jetties, etc.	Atlantic coast	Common	New England to Florida	Moderate
Northern puffer <u>Sphaeroides</u> <u>maculatus</u>	Shallow water sandy areas	Atlantic coast	Common	New England to Florida	Moderate
Southern puffer <u>Sphaeroides</u> <u>nepheleus</u>	Shallow water grassy areas and tidal creeks	Atlantic and Gulf coasts	Common	Florida	Moderate
Bandtail puffer <u>Sphaeroides</u> <u>spengleri</u>	Grass beds, patch reefs and tidal creeks	Atlantic and Gulf coasts	Fairly common	New England to Florida	Moderate
Checkered puffer <u>Sphaeroides</u> <u>testudineus</u>	Shallow water grass beds and tidal creeks	Atlantic and Gulf coasts	Common	New England to Mexico	Minimal
DIODONTIDAE					
Bridled burrfish <u>Chilomycterus</u> <u>antennatus</u>	Shallow water patch reefs	Atlantic coast	Uncommon	Florida	Severe
Web burrfish <u>Chilomycterus</u> <u>antillarum</u>	Deep water reefs	Atlantic coast	Uncommon	Florida	Severe
Striped burrfish <u>Chilomycterus</u> <u>schoepfi</u>	Shallow water reefs and rocky and sand areas	Atlantic and Gulf coasts	Abundant	New England through Florida	Moderate

Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
Balloonfish <u>Diodon</u> <u>holocanthus</u>	Shallow water reefs and tidal creeks	Atlantic and Gulf coasts	Common	Florida	Minimal
Porcupinefish <u>Diodon</u> <u>hystrix</u>	Shallow water reefs and grass beds	Atlantic and Gulf coasts	Common	New England through Florida	Moderate



Species	Habitat and/or Seasonal Status	Range in Region or State	Abundance in Region	U.S. Range	Project Impact
BIRDS:					
Eastern brown pelican <u>Pelecanus</u> <u>occidentalis</u> <u>carolinensis</u>	Atlantic and Gulf coasts	Both coasts, Keys	Rare (Locally common)	S. Carolina to Texas	Minimal
Surfbirds, turnstones, plovers	Atlantic and Gulf coasts	Both coasts Keys	Abundant	Coastal	Minimal
Terns, gulls	Atlantic and Gulf coasts	Both coasts, Keys	Abundant	Coastal	Minimal

